



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

SW

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,467	12/20/2001	Michael Alan Schmidt	659/793	1568

7590 04/27/2004

BRINKS HOFER GILSON & LIONE  
P.O. BOX 10395  
CHICAGO, IL 60610

EXAMINER
----------

ALIE, GHASSEM

ART UNIT	PAPER NUMBER
----------	--------------

3724

10

DATE MAILED: 04/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/027,467

Applicant(s)

SCHMIDT ET AL.

Examiner

Ghassem Alie

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 14-25 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 14-25 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 12/20/01 and 1/30/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

***Specification***

1. The specification is objected to under 37 CFR 1.71 because it is not clear to one ordinary skill in the art how the sheet is diverted from the processing apparatus. It is not clear what is the main direction or line of travel of the sheet of material. Therefore, it is not clear what is the purpose of breaking or cutting in sections the sheet by nip rolls, since the transfer blade (the main cutting device) is handling the cutting operation. It is also not clear what is the purpose of having two cutting devices doing the same cutting operation.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 17 and 24 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which is not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Regarding claims 17 and 24, the disclosure also fails to teach what is the purpose of breaking or cutting in sections the sheet by nip rolls, since the transfer blade (the main cutting device) already cutting the sheet. It is not clear what is the purpose of cutting or breaking the sheet into sections by another cutting means instead of transfer blade, when the sheet is directed away from the processing apparatus.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3724

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 23 is rejected under 35 U.S.C. 102(b) as being anticipated by Sankaran et al. (5,383,622), hereinafter Sankaran. Regarding claim 23, Sankaran teaches apparatus for threading a sheet material including a means 36 for directing a sheet 30 toward a processing apparatus 2, 22, 34. Sankaran also teaches means 28 for cutting and means for 12, 16 for directing the sheet 30 away from the processing apparatus 2, 22, 34. The rolls 12 and 16 divert away the sheet 30 from the processing apparatus 2, 22, 34 which is defined by the belt wrapper 22, mandrel 2, and the belt wrapper tucking roll 34. Sankaran also teaches means 28, 36 for simultaneously cutting the sheet 28 and directing the sheet 30 toward the processing apparatus 2, 22, 34. See Figs. 1-3 and col. 4, lines 31-67 and col. 5, lines 1-61 in Sankaran.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 14-16, 20, and 22, are rejected under 35 U.S.C. 103(a) as being unpatentable over Sankaran in view of Campbell, Jr. (5,024,128), hereinafter Campbell. Regarding claim 14, Sankaran teaches a transfer blade 28 having a retracted position and an extended position, and a roll 12 wherein a sheet of material 30 passing between the retracted position and the extended position is diverted away from a processing apparatus 2, 22, 34 by the roll 12. The roll 12 diverts away the sheet 30 from the processing apparatus 2, 22, 34 which is defined by

Art Unit: 3724

the belt wrapper 22, mandrel 2, and the belt wrapper tucking roll 34. Sankaran also teaches that the movement of the transfer blade 28 from the retracted position to the extended position directs the sheet 30 toward a processing apparatus 2, 22, 34. See Figs. 1-3 and col. 4, lines 31-67 and col. 5, lines 1-61 in Sankaran. Sankaran does not teach that the roll 12 is a pair of nip roll and the sheet of material passes between the nip rolls. However, the use of nip rolls for creating tension in the sheet of material before the sheet is cut and delivering the sheet to the delivery system is well known in the art such as taught by Campbell. Campbell teaches a pair of nip rolls 80, 81 for creating tension on the sheet 10 before the cutting action by a cutting head and delivering the web to the delivery system. See Fig. 3 and col. 3, lines 8-68 and col. 4, lines 1-32 in Campbell. It would have been obvious to a person of ordinary skill in the art to replace roll 12 of Sankaran's cutting apparatus with the pair of nip rolls as taught by Campbell in order to facilitate the cutting of the sheet of material by creating tension in the sheet of material before the cutting operation and help delivering the sheet of material to the delivery system.

Regarding claim 15, Sankaran teaches everything noted above including that the movement of the transfer blade 28 from the retracted position to the extended position breaks the sheet 30. See Fig. 1 and 2 in Sankaran.

Regarding claim 16, Sankaran as modified by Campbell teaches everything noted above including that the sheet 30 is in contact with the nip rolls 80, 81 as taught by Campbell. See Fig. 1 in Sankaran and Fig. 2 in Campbell.

Art Unit: 3724

Regarding claim 20, Sankaran teaches everything noted above including an idler nip roll 36 wherein the idler nip roll 36 provides tension to the sheet 30 when the sheet is in contact with the transfer blade 28. See Figs. 1 and 2 in Sankaran.

Regarding claim 22, Sankaran as modified by Campbell teaches everything noted above including that the transfer blade 28 and nip rolls 80, 81, as taught by Campbell, are automatically controlled such that the sheet 30 transfers between being directed toward the processing apparatus 2, 22, 34 and being diverted away from the processing apparatus in a continuous manner. See Figs. 1-3 and col. 4, lines 31-67 and col. 5, lines 1-61 in Sankaran and Fig. 3 in Campbell.

8. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sankaran in view of Campbell, as applied to claim 14, and in further view of Lotto et al. (5,588,644), hereinafter Lotto. Regarding claim 17, Sankaran as modified by Campbell teaches everything noted above except the sheet of material is broken by the stress applied to the sheet by the rotation of the nip rolls at a faster speed than the speed of the sheet passing between the nip rolls. However, Lotto teaches a sheet of material 26b moves at a first speed and is broken by the stress or tension, which is created by the rotation of a pair of nip rolls 34a and 34b at a second speed greater than the first speed. See Fig. 3 and col. 5, lines 1-22 in Lotto. It would have been obvious to a person of ordinary skill in the art to provide nip rolls of Sankaran's cutting apparatus, as modified by Campbell, with the speed greater than the speed of the sheet material as taught by Lotto in order to break the sheet of material by the nip rolls without using the transfer blade.

Art Unit: 3724

Regarding claim 18, Sankaran as modified above teaches everything noted above including that the sheet 30 moves at a first speed and is broken by a stress applied to the sheet 30 by the combination of the movement of the transfer blade 28 from the retracted position to the extended position and the rotation of the nip rolls at a second speed greater than the first speed as taught by Lotton. The combination of the extension of the transfer blade 28 and the nip rolls with the speed greater than the sheet material can break the sheet of material 30 either at its point of contact with the transfer blade 28 or close to its point of contact with the nip rolls 80, 81, as taught by Campbell.

9. Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sankaran in view of Campbell, as applied to claim 14, and in further view of Dambroth (3,817,467). Regarding claim 19, Sankaran as modified by Campbell teaches everything noted above except that the transfer blade has air jets. However, the use of air jets with the transfer blades are well known in the art such as taught by Dambroth. Dambroth teaches a transfer blade 11 which has a plurality of individual air nozzles 23. See Fig. 5 and col. 3, lines 4-29 in Dambroth. It would have been obvious to a person of ordinary skill in the art to provide of Sankaran's transfer blade apparatus with the air jet nozzles as taught by Dambroth in order to create tension on the sheet of material prior to the cutting operation by the transfer blade.

Regarding claim 21, Sankaran as modified by Campbell teaches everything noted above except that the sheet is a fibrous web. Dambroth teaches that web 11 is a textile material. The textile material is considered to be a fibrous material. See col. 1, lines 9-13 in Dambroth. It would have been obvious to a person of ordinary skill in the art to cut with

Art Unit: 3724

Sankaran's cutting apparatus the fibrous web as taught by Dambroth, since Sankaran's cutting machine is also capable of cutting fibrous web.

10. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sankaran in view of Campbell, as applied to claim above, and in further view of Lotto et al. (5,588,644), hereinafter Lotto. Regarding claim 17, Sankaran as modified by Campbell teaches everything noted above except the sheet of material is cut in sections when sheet is directed away from the processing apparatus. However, Lotto teaches a sheet of material 26b moves at a first speed and is broken by the stress or tension, which is created by the rotation of a pair of nip rolls 34a and 34b at a second speed greater than the first speed. See Fig. 3 and col. 5, lines 1-22 in lotto. It would have been obvious to a person of ordinary skill in the art to provide nip rolls of Sankaran's cutting apparatus, as modified by Campbell, with the speed greater than the speed of the sheet material as taught by Lotto in order to cut the sheet of material into sections by the nip rolls without using the transfer blade.

11. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sankaran in view of Dambroth. Regarding claim 25, Sankaran teaches everything noted above except that the sheet is a fibrous web. Dambroth teaches that web 11 is a textile material. The textile material is considered to be a fibrous material. See col. 1, lines 9-13 in Dambroth. It would have been obvious to a person of ordinary skill in the art to cut with Sankaran's cutting apparatus the fibrous web as taught by Dambroth, since Sankaran's cutting machine is also capable of cutting fibrous web.

### ***Response to Arguments***

12. Applicant's arguments with respect to claims 14-25 have been considered but are



Art Unit: 3724

moot in view of the new ground(s) of rejection.

In view of submission of the new drawings (Figs. 14 and 15) the drawings objections are withdrawn.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kohler (5,383,622), Dropczynski et al. (4,552,316 and 4,408,727), Wohld et al. (6,435,449), McClenathan (4,529,141), Nowisch (4,422,588), De Roeck et al. (4,097,323), and Okudo et al. (3,918,645) teach a transfer blade having a retracted position and an extended position. Buchko (6,085,490) and Cram et al. (5,620,544) teach an apparatus for cutting sheet material having a pair of nip rolls.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (703) 305-4981. The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on (703) 305-1082. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9302 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

Application/Control Number: 10/027,467

Page 9

Art Unit: 3724

GA/ga

April 16, 2004

  
Allan N. Shoap  
Supervisory Patent Examiner  
Group 3700